CLAIMS

What is claimed is:

1.   A transmitter for transmitting a plurality of signals at a plurality of modulations and frequencies comprising:

a signal configuration input for use by an operator to select signal configuration settings for transmitter signals;

a controller responsive to the signal configuration input for storing the selected signal configurations in memory locations;

a plurality of user inputs;

apparatus responsive to each user input for retrieving the signal configuration associated therewith; and

transmitter circuitry for transmitting the selected signal configuration received from the controller at a predetermined frequency.

2.   A transmitter according to claim 1, wherein the plurality of user inputs comprises:

a plurality of user inputs each associated with a stored signal configuration.

3.   A transmitter according to claim 1, wherein the signal configuration input further comprise:

a multi-position switch for selecting a type of transmitter that is to be emulated; and

a multi-position switch for selecting a code to be transmitted by the transmitter.

4.   A transmitter according to claim 1, wherein the user inputs comprise:

a first switch capable of identifying to the controller the location of a first

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signal configuration to be retrieved and transmitted; and

a second switch capable of identifying to the controller the location of a second signal configuration to be retrieved and transmitted.

5.   A transmitter according to claim 1, wherein the transmitter circuitry comprises:

a single transmitter circuit for selectively transmitting a signal at one of a plurality of different frequencies.

6.   A transmitter according to claim 5, wherein the single transmitter circuit further comprises a transmitter circuit selectively operable at frequencies of 300 MHZ, 310 MHZ and 390 MHZ.

7.   A universal transmitter according to claim 1, wherein the transmitter circuitry comprises:

a first transmitter circuit capable of transmitting at a first predetermined frequency; and

a second transmitter circuit capable of transmitting at a second predetermined frequency.

8.   A method of programming a universal transmitter comprising:

setting a signal configuration input to a first set of desired positions corresponding to a first signal configuration;

storing the first signal configuration into a first memory location;

setting the signal configuration input to a second set of desired positions corresponding to a second signal configuration;

storing the second signal configuration into a second memory location;

associating one of a plurality of user inputs with each stored signal configuration; and

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receiving one of the plurality of user inputs and transmitting the stored signal configuration associated therewith.

9.   A method of programming a transmitter comprising:

setting a signal configuration input to a first set of desired positions corresponding to a first signal configuration;

selecting a desired user input with which the first selected signal configuration is to be associated;

storing the first selected signal configuration into a first memory location;

setting the signal configuration input to a second set of desired positions corresponding to a second signal configuration;

selecting a desired user input with which the second selected signal configuration is to be associated; and

storing the second selected signal configuration into a second memory location.

10.   A method of programming a transmitter including a plurality of multi-position signal configuration switches comprising:

setting the multi-position switches to a first set of desired positions corresponding to a first signal configuration;

selecting a desired user input during a first learn mode operation with which the first selected signal configuration is to be associated;

storing the first signal configuration into a first memory location;

setting the multi-position switches to a second set of desired positions corresponding to a second signal configuration;

selecting a desired user input during a second learn mode operation with which the second selected signal configuration is to be associated; and

storing the second signal configuration into a second memory location.

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11.   A method according to claim 10, comprising:

        depressing a predetermined user input for a predetermined period of time in order to place the transmitter into a learn mode.

12.   A method according to claim 10, comprising:

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        identifying from the selected multi-position switch settings a type of transmitter to be emulated.

13.   A method according to claim 10, comprising:

        identifying from the selected multi-position switch settings a code format to be transmitted.

14.   A method according to claim 10, comprising:

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        identifying from the selected multi-position switch settings a modulation format at which a signal is to be transmitted.

15.   A method according to claim 10, comprising:

        identifying from the selected multi-position settings a frequency at which a signal is to be transmitted.

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ABSTRACT OF THE DISCLOSURE

A universal transmitter capable of transmitting a plurality of signals at a plurality of different modulations and frequencies which provides a simplified programming setup so that multiple signal configurations (including code format, modulation format and frequency) can be programed quickly and easily. The transmitter comprises a signal configuration input which an operator can use to select a desired signal configuration for transmission, a controller for interpreting the selected signal configuration, storing it to memory, retrieving it when the appropriate user input is depressed, and outputting it to a transmitter circuit capable of transmitting the selected signal configuration received from the controller at a predetermined modulation and frequency, and at least one user input for actuating the transmitter and identifying to the controller what signal configuration is to be transmitted by the transmitter.